



ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY TITLE V PERMIT

COMPANY: *El Paso Natural Gas Company*
FACILITY: *HACKBERRY COMPRESSOR STATION*
PERMIT #: *1000165*
DATE ISSUED: *May 28, 1998*
EXPIRY DATE: *May 28, 2003*

SUMMARY

This operating permit is issued to El Paso Natural Gas Company (EPNG), the Permittee, for operation of their Hackberry Compressor Station located 20 miles east of Kingman, Arizona, one mile north off Interstate 40 at Exit 71.

El Paso Natural Gas Company (EPNG) provides natural gas transportation services for natural gas suppliers and end users throughout the southwestern United States, and owns and operates a large natural gas pipeline network. The Hackberry compressor station is one of several such stations that provide natural gas compression to the pipeline network. Compression is needed to maintain enough pressure in the pipeline to keep the natural gas flowing, and is accomplished at Hackberry by **two natural gas-fired General Electric Model M3962R regenerative cycle turbine engines**, each driving a compressor unit. Primary electric power for the facility is purchased. Electric generators attached to the gas turbine engines supply electrical power as a backup. When the turbine engines are not operating, an auxiliary generator is used for electric power. There is no air pollution control equipment installed on either of the gas turbine engines at the Hackberry compressor station. The two turbines were installed in 1965 and have been "grandfathered", hence they have not been subject to any Prevention of Significant Deterioration (PSD) review. The facility is permitted to operate 365 days a year, 24 hours a day. This facility has been automated and is therefore an unattended station. All records relating to this permit will be kept at the Flagstaff Complex Office, 3920 E. El Paso Dr., Flagstaff, AZ, 86004.

All terms and conditions of this permit are enforceable by the Administrator of the United States Environmental Protection Agency (U.S. EPA). This permit cites only the current state rules. The rules in the applicable State Implementation Plan (SIP) have been renumbered but the language in the current rules is either more stringent or the same. Only Rule R9-3-527.C. has been included in this permit from the applicable SIP because this rule was substantially different. A copy of a rule conformity test between the current rules and the applicable SIP is attached with the technical analysis.

Table 1 summarizes the requirements for operation of equipment emitting emissions in significant quantities. Activities generating insignificant quantities of air emissions for which there are no applicable requirements are listed in Attachment "E". The total potential emissions emitted from this facility (excluding insignificant activities) are as follows. These figures are for information purposes only and are not enforceable limits.

Pollutants	Nitrogen Oxides	Carbon Monoxide	Volatile Organic Compounds	Formaldehyde	Sulfur Dioxide	PM
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El Paso Natural Gas Company - Hackberry Compressor Station

Emissions (Tons Per Year)	460.96	70.34	14.24	5.90	0.30	10.74
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TABLE OF CONTENTS

ATTACHMENT "A": GENERAL PROVISIONS	6
I. PERMIT EXPIRATION AND RENEWAL	6
II. COMPLIANCE WITH PERMIT CONDITIONS	6
III. PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE	6
IV. POSTING OF PERMIT	7
V. FEE PAYMENT	7
VI. ANNUAL EMISSIONS INVENTORY QUESTIONNAIRE	7
VII. COMPLIANCE CERTIFICATION	7
VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS	8
IX. INSPECTION AND ENTRY	8
X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD	9
XI. PERMIT DEVIATION REPORTING	9
XII. RECORD KEEPING REQUIREMENTS	11
XIII. REPORTING REQUIREMENTS	12
XIV. DUTY TO PROVIDE INFORMATION	12
XV. PERMIT AMENDMENT OR REVISION	12
XVI. FACILITY CHANGE WITHOUT PERMIT REVISION	13
XVII. TESTING REQUIREMENTS	14
XVIII. PROPERTY RIGHTS	15
XIX. SEVERABILITY CLAUSE	15
XX. PERMIT SHIELD	15
ATTACHMENT "B": SPECIFIC CONDITIONS	16
I. EMISSION LIMITS/ STANDARDS	16
II. MONITORING AND RECORDKEEPING REQUIREMENTS	20
III. REPORTING REQUIREMENTS	22
IV. TESTING REQUIREMENTS	23
ATTACHMENT "C": APPLICABLE REQUIREMENTS	24
ATTACHMENT "D": EQUIPMENT LIST	26
ATTACHMENT "E": INSIGNIFICANT ACTIVITIES	27

El Paso Natural Gas Company - Hackberry Compressor Station

EL PASO NATURAL GAS COMPANY - Hackberry Compressor Station

TABLE 1: Summary of Permit Requirements

Emissions Unit	Pollutants Emitted	Control Measure	Emission Limits/Standards	Monitoring/Recordkeeping	Reporting ⁽¹⁾	Testing Frequency/ Methods
<u>POINT SOURCES</u> P1. Regenerative Cycle Gas Turbine Stack 1 P2. Regenerative Cycle Gas Turbine Stack 2 (Fuel -Natural Gas) [R18-2-719]	PM	No controls installed	$E = 1.02 Q^{0.769} \text{ lb/hr}$	Daily lower heating value of fuel OR Copy of FERC-approved Tariff agreement, lower heating value $\geq 967 \text{ BTU/ft}^3$	Any change in Tariff agreement relating to lower heating value within 30 days	--
	SO ₂		-Sulfur - <0.8% by weight -Fuel - Use only pipeline quality natural gas	Daily sulfur content OR Copy of FERC-approved Tariff agreement, where sulfur content is <0.8 percent by weight	Any daily period when sulfur >0.8% OR Any change in Tariff agreement relating to sulfur content within 30 days	--
	NO _x , CO, VOC, HAPs		**	Dates of turbine operation until the required performance testing is triggered.	-Semi-annual reports of dates of operation until the performance test is triggered - Status of testing requirement until performance test is complete	One time for NO _x on each turbine within six months of permit expiration if turbines are operated for more than 15 cumulative days using Method 20
	Opacity		-<40% for any period > 10 consecutive seconds -Starting cold equipment exempt for first 10 minutes	--	--	--

El Paso Natural Gas Company - Hackberry Compressor Station

Emissions Unit	Pollutants Emitted	Control Measure	Emission Limits/Standards	Monitoring/Recordkeeping	Reporting ⁽¹⁾	Testing Frequency/ Methods
<u>FUGITIVE SOURCES</u>						
F1. Non-Point sources						
a. Driveways, parking areas, vacant lots [A.A.C. R18-2-604.A]	Opacity	Gravel	<40%	Maintain gravel, Dates gravel added	--	--
b. Unused open areas [A.A.C. R18-2-604.A]	Opacity	Native vegetation	<40%	Dates fresh vegetation added	--	--
c. Open areas (Used, altered, repaired, etc.) [A.A.C. R18-2-604.A]	Opacity	Dust suppressants, wetting agents	<40%	Date and type of activity performed, Type of controls used	--	--
d. Construction of roadways [A.A.C. R18-2-605.A]	Opacity	Dust suppressants, wetting agents	<40%	Date and type of activity performed, Type of controls used	--	--
e. Material transportation [A.A.C. R18-2-605.B]	Opacity	Covering, dust suppressants, wetting agents	<40%	Date and type of activity performed, Type of controls used	--	--
f. Material handling [A.A.C. R18-2-606]	Opacity	Dust suppressants, wetting agents	<40%	Date and type of activity performed, Type of controls used	--	--
g. Storage piles [A.A.C. R18-2-607.A]	Opacity	Covering, dust suppressants, wetting agents	<40%	Date and type of activity performed, Type of controls used	--	--
h. Stacking and reclaiming machinery at storage piles [A.A.C. R18-2-607.B]	Opacity	Minimum fall, dust suppressants, wetting agents	<40%	Date and type of activity performed, Type of controls used	--	--
i. Roadway and site cleaning [A.A.C. R18-2-804.B]	Opacity	Dust suppressants, wetting agents	< 40%	Date and type of activity performed, Type of controls used	--	--

El Paso Natural Gas Company - Hackberry Compressor Station

Emissions Unit	Pollutants Emitted	Control Measure	Emission Limits /Standards	Monitoring/Recordkeeping	Reporting ⁽¹⁾	Testing Frequency/ Methods
F2. Abrasive Blasting [R18-2-702.B, 726]	Opacity	Wet blasting or effective enclosures with necessary dust collecting equipment	<40%	Date and type of project, Control measures used	--	--
F3. Spray Painting [R18-2-702.B, 727, SIP R9-3-527.C]	VOC	Enclosures	96% capture, except for arch. coating or spot painting dispose < 1.5 gallons	Date, duration of project. Control measures used, MSDS of paints used	--	--
	Opacity	Enclosures	<40%	Date, duration of project, Control measures used	--	--
F4. Mobile Sources						
<i>a. Off road machinery</i> [A.A.C. R18-2-802]	Opacity	Not required	<40% for any period > 10 consecutive seconds	Records of emissions related maintenance activities performed on Permittee's off-road machinery stationed at the facility	--	--
<i>b. Roadway and site cleaning machinery</i> [A.A.C. R18-2-804.A]	Opacity	Not required	<40% for any period > 10 consecutive seconds	Records of emissions related maintenance activities performed on Permittee's roadway and site cleaning machinery stationed at the facility	--	--
F5. Demolition/Renovation [A.A.C. R18-2-1101.A.8]	Asbestos	As required by rule	As required by rule	Relevant paperwork on file	--	--

NOTE: HAPs are emitted in trace quantities

⁽¹⁾ Semiannual Compliance Certifications required for all permitted equipment

-- : Not required

** : No limits established

ATTACHMENT "A": GENERAL PROVISIONS

Air Quality Control Permit No. Permit No. 1000165

For

EL PASO NATURAL GAS COMPANY - Hackberry Compressor Station

I. PERMIT EXPIRATION AND RENEWAL [A.R.S. § 49-426.F, A.A.C. R18-2-304.C.2, and 306.A.1]

- A. This permit is valid for a period of five years from the date of issuance of the permit.
- B. The permittee shall submit a application for renewal of this permit at least 6 months, but not more than 18 months prior to the date of permit expiration.

II. COMPLIANCE WITH PERMIT CONDITIONS [A.A.C. R18-2-306.A.8]

- A. The permittee shall comply with all conditions of this permit including all applicable requirements of Arizona air quality statutes and the air quality rules. Any permit noncompliance constitutes a violation of the Arizona Revised Statutes and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. In addition, noncompliance of any federally enforceable requirement constitutes a violation of the Clean Air Act.
- B. Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

III. PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE [A.A.C. R18-2-306.A.8.c and 321]

- A. The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination; or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- B. The permit shall be reopened and revised under any of the following circumstances:
 - 1. Additional applicable requirements under the Act become applicable to the Class I source. Such reopening shall only occur if there are three or more years remaining in the permit term. The reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to R18-2-322(B). Any permit revision required pursuant to this subparagraph shall comply with provisions in R18-2-322 for permit renewal and shall reset the five year permit term.

El Paso Natural Gas Company - Hackberry Compressor Station

2. Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Class I permit.
3. The Director or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
4. The Director or the Administrator determines that the permit needs to be revised or revoked to assure compliance with the applicable requirements.
5. Proceedings to reopen and issue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance and shall, except for reopenings under paragraph 1 above, affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable. Permit reopenings for reasons other than those stated in paragraph III.B.1 of this Attachment shall not result in a resetting of the five year permit term.

IV. POSTING OF PERMIT

[A.A.C. R18-2-315]

- A. Permittee shall post such permit, or a certificate of permit issuance on location where the equipment is installed in such a manner as to be clearly visible and accessible. All equipment covered by the permit shall be clearly marked with one of the following:
 1. Current permit number.
 2. Serial number or other equipment number that is also listed in the permit to identify that piece of equipment.
- B. A copy of the complete permit shall be kept on the site.

V. FEE PAYMENT

[A.A.C. R18-2-326 and 306.A.9]

Permittee shall pay fees to the Director pursuant to A.R.S. § 49-426(E) and A.A.C. R18-2-326.

VI. ANNUAL EMISSIONS INVENTORY QUESTIONNAIRE

[A.A.C. R18-2-327]

- A. Permittee shall complete and submit to the Director an annual emissions inventory questionnaire. The questionnaire is due by March 31 or ninety days after the Director makes the inventory form available each year, whichever occurs later, and shall include emission information for the previous calendar year.
- B. The questionnaire shall be on a form provided by the Director and shall include the information required by A.A.C. R18-2-327.

VII. COMPLIANCE CERTIFICATION

[A.A.C. R18-2-309]

El Paso Natural Gas Company - Hackberry Compressor Station

- A. Permittee shall submit a compliance certification to the Director twice each year, which describes the compliance status of the source with respect to each permit condition. The first certification shall be submitted no later than April 15th, and shall report the compliance status of the source during the period between September 16th of the previous year, and March 15th of the current year. The second certification shall be submitted no later than October 15th, and shall report the compliance status of the source during the period between March 16th and September 15th of the current year.

The compliance certification shall include the following:

1. Identification of each term or condition of the permit that is the basis of the certification;
 2. Compliance status of each applicable requirement;
 3. Whether compliance was continuous or intermittent;
 4. Method(s) used for determining the compliance status of the source, currently and over the reporting period;
 5. All instances of deviations from permit requirements reported pursuant to Section XI.B of this Attachment; and
 6. A progress report on all outstanding compliance schedules submitted pursuant to Section XI.C of this Attachment.
- B. A copy of all compliance certification for Class I permits shall also be submitted to the EPA Administrator.

VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS [A.A.C. R18-2-309.3]

Any document required to be submitted by this permit, including reports, shall contain a certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this part shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

IX. INSPECTION AND ENTRY [A.A.C. R18-2-309.4]

The permittee shall allow the Director or the authorized representative of the Director upon presentation of proper credentials to:

- A. Enter upon the permittee's premises where a source is located or emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;
- B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;

El Paso Natural Gas Company - Hackberry Compressor Station

- C. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
- D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
- E. Record any inspection by use of written, electronic, magnetic and photographic media.

X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD

[A.A.C. R18-2-304.C]

If this source becomes subject to a standard promulgated by the Administrator pursuant to section 112(d) of the Act, then the permittee shall, within twelve months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

XI. PERMIT DEVIATION REPORTING

A. EXCESS EMISSIONS REPORTING

[A.A.C. R18-2-306.A.5.b, 306.E.3.d, and 310]

- 1. Emissions in excess of an applicable emission limitation contained in Section I of Attachment "B" of this permit shall constitute a violation. For all situations that constitute an emergency as defined in R18-2-306(E), the affirmative defense and reporting requirements contained in that provision shall apply.
- 2. It shall be the burden of the permittee to demonstrate, through submission of the data and information required by this section, that all reasonable and practicable measures within the permittee's control were implemented to prevent the occurrence of excess emissions.
- 3. Excess emissions shall be reported as follows:
 - a. The Permittee shall report to the Director any emissions in excess of the limits established by this permit. Such report shall be in two parts as specified below:
 - (1) Notification by telephone or facsimile within 24 hours of the time when the permittee first learned of the occurrence of excess emissions including all available information from paragraph b. of this subsection.
 - (2) Detailed written notification within 72 hours of the notification pursuant to subparagraph (1) of this paragraph.
 - b. Report shall contain the following information:
 - (1) Identity of each stack or other emission point where the excess emissions occurred.

El Paso Natural Gas Company - Hackberry Compressor Station

- (2) Magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions.
 - (3) Date, time and duration or expected duration of the excess emissions.
 - (4) Identity of the equipment from which the excess emissions emanated.
 - (5) Nature and cause of such emissions.
 - (6) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions.
 - (7) Steps taken to limit the excess emissions. If the source's permit contains procedures governing source operation during periods of start-up or malfunction and the excess emissions resulted from start-up or malfunction, the report shall contain a list of the steps taken to comply with the permit procedures.
4. In the case of continuous or recurring excess emissions, the notification requirements of this section shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to subsection A.3.a.(2) of this Section.
5. EMERGENCY PROVISION [A.A.C. R18-2-306.E]
 - a. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
 - b. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of paragraph d of this section are met.
 - c. The permittee shall submit notice of the emergency to the Director by certified mail, facsimile or hand delivery within 2 working days of the time when emission limitations were exceeded due to an emergency. This notice

El Paso Natural Gas Company - Hackberry Compressor Station

shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

- d. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - (4) The notice was submitted per paragraph c. above.
- e. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- f. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

B. OTHER PERMIT DEVIATIONS [A.A.C. R18-2-306.A.5, 306.A.6, and 306.E.3.d]

Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Prompt reporting shall mean that the report was submitted to the Director by certified mail, facsimile, or hand delivery within two working days of the time the deviation occurred.

C. COMPLIANCE SCHEDULE

For any episode of non-compliance that is reported pursuant to XI.A and XI.B above, and that cannot be corrected within 72 hours, the Permittee is required to submit a compliance schedule to the Director within 21 days of such occurrence. The compliance schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with the permit terms or conditions that have been violated.

XII. RECORD KEEPING REQUIREMENTS [A.A.C. R18-2-306.A.4]

- A. Permittee shall keep records of all required monitoring information including, but not limited to, the following:
 - 1. The date, place as defined in the permit, and time of sampling or measurements;
 - 2. The date(s) analyses were performed;

El Paso Natural Gas Company - Hackberry Compressor Station

3. The name of the company or entity that performed the analyses;
 4. A description of the analytical techniques or methods used;
 5. The results of such analyses; and
 6. The operating conditions as existing at the time of sampling or measurement.
- B. Permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

XIII. REPORTING REQUIREMENTS

[A.A.C. R18-2-306.A.5.a]

Permittee shall comply with all of the reporting requirements of this permit. These include all of the following:

- A. Compliance certifications pursuant to Attachment A, Section VII of this Permit.
- B. Permit deviation reporting pursuant to Attachment A, Sections XI.A, XI.B, and XI.C of this permit.
- C. Reporting requirements listed in Attachment B, Section III of this permit.

XIV. DUTY TO PROVIDE INFORMATION

[A.A.C. R18-2-304.G and 306.A.8.e]

- A. The permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the permittee shall furnish an additional copy of such records directly to the Administrator along with a claim of confidentiality.
- B. If the permittee has failed to submit any relevant facts or if the permittee has submitted incorrect information in the permit application, the permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

XV. PERMIT AMENDMENT OR REVISION

[A.A.C. R18-2-318, 319, and 320]

Permittee shall apply for a permit amendment or revision for changes to the facility which do not qualify for a facility change without revision under Section XVI, as follows:

- A. Administrative Permit Amendment (A.A.C. R18-2-318);
- B. Minor Permit Revision (A.A.C. R18-2-319);

- C. Significant Permit Revision (A.A.C. R18-2-320).

The applicability and requirements for such action are defined in the above referenced regulations.

XVI. FACILITY CHANGE WITHOUT PERMIT REVISION

[A.A.C. R18-2-317]

- A. Permittee may make changes at the permitted source without a permit revision if all of the following apply:
1. The changes are not modifications under any provision of Title I of the Act or under A.R.S. § 49-401.01(17).
 2. The changes do not exceed the emissions allowable under the permit whether expressed therein as a rate of emissions or in terms of total emissions.
 3. The changes do not violate any applicable requirements or trigger any additional applicable requirements.
 4. The changes satisfy all requirements for a minor permit revision under R18-2-319(A).
 5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
- B. The substitution of an item of process or pollution control equipment for an identical or substantially similar item of process or pollution control equipment shall qualify as a change that does not require a permit revision, if it meets all of the requirements of subsections (A) and (C) of this Section.
- C. For each such change under subsections A and B of this Section, a written notice by certified mail or hand delivery shall be received by the Director and, for Class I permits, the Administrator, a minimum of 7 working days in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided less than 7 working days in advance of the change but must be provided as far in advance of the change as possible or, if advance notification is not practicable, as soon after the change as possible.
1. Each notification shall include:
 - a. When the proposed change will occur.
 - b. A description of each such change.
 - c. Any change in emissions of regulated air pollutants.
 - d. The pollutants emitted subject to the emissions trade, if any.

- e. The provisions in the implementation plan that provide for the emissions trade with which the source will comply and any other information as may be required by the provisions in the implementation plan authorizing the trade.
- f. If the emissions trading provisions of the implementation plan are invoked, then the permit requirements with which the source will comply.
- g. Any permit term or condition that is no longer applicable as a result of the change.

XVII. TESTING REQUIREMENTS

A. Operational Conditions During Testing

Tests shall be conducted during operation at the normal rated capacity of each unit, while operating at representative operational conditions unless other conditions are required by the applicable test method in this permit. With prior written approval from the Director, testing may be performed at a lower rate. Operations during start-up, shutdown, and malfunction (as defined in A.A.C. R18-2-101) shall not constitute representative operational conditions unless otherwise specified in the applicable standard.

B. Test Plan

At least 14 calendar days prior to performing a test, the owner or operator shall submit a test plan to the Director, in accordance with A.A.C. R18-2-312.B and the Arizona Testing Manual. This test plan must include the following:

- 1. test duration;
- 2. test location(s);
- 3. test method(s); and
- 4. source operation and other parameters that may affect test results.

C. Stack Sampling Facilities

Permittee shall provide or cause to be provided, performance testing facilities as follows:

- 1. Sampling ports adequate for test methods applicable to the facility;
- 2. Safe sampling platforms;
- 3. Safe access to sampling platforms; and
- 4. Utilities for sampling and testing equipment.

D. Interpretation of Final Results

Each performance test shall consist of three separate runs using the required test method. Each run shall be conducted in accordance with the applicable standard and test method. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. If a sample is accidentally lost or conditions occur which

El Paso Natural Gas Company - Hackberry Compressor Station

are not under the permittee's control and which may invalidate the run, compliance may, upon the Director's approval, be determined using the arithmetic mean of the other two runs.

E. Report of Final Test Results

A written report of the results of all performance tests shall be submitted to the Director within 30 days after the test is performed. The report shall be submitted in accordance with the Arizona Testing Manual and A.A.C. R18-2-312.A.

F. Cessation of Testing After the First Run has Started

If the Director or the Director's designee is not present, tests may only be stopped for good cause. Good cause includes, forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions or other conditions beyond the permittee's control. Termination of any test without good cause after the first run is commenced shall constitute a failure of the test. Supporting documentation which demonstrates good cause must be submitted.

XVIII. PROPERTY RIGHTS

[A.A.C. R18-2-306.A.8.d]

This permit does not convey any property rights of any sort, or any exclusive privilege.

XIX. SEVERABILITY CLAUSE

[A.A.C. R18-2-306.A.7]

The provisions of this permit are severable. If any provision of this permit is held invalid, the remainder of this permit shall not be affected thereby.

XX. PERMIT SHIELD

[A.A.C. R18-2-325]

Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements identified in Attachment "C" of this permit. The permit shield shall not apply to any changes made pursuant to Section XV.B of this Attachment and Section XVI of this Attachment.

ATTACHMENT "B": SPECIFIC CONDITIONS

Air Quality Control Permit No. 1000165

For

EL PASO NATURAL GAS COMPANY - Hackberry Compressor Station

I. EMISSION LIMITS/ STANDARDS

A. Natural Gas Fired General Electric Regenerative Gas Turbines

1. Particulate Matter Standard [A.A.C. R18-2-719.C.1]

Permittee shall not cause, allow or permit the emission of particulate matter, caused by combustion of fuel, from the stationary gas turbine engines in excess of the amount calculated by the following equation:

$$E = 1.02 Q^{0.769} \quad \text{where:}$$

E = the maximum allowable particulate emissions rate in pounds-mass per hour

Q = the heat input in million BTU per hour.

2. Opacity Standard [A.A.C. R18-2-719.E]

Permittee shall not cause, allow or permit to be emitted into the atmosphere from the stationary gas turbine engines, smoke for any period of time greater than ten consecutive seconds which exceeds 40 percent opacity. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes.

3. Fuel Limitation [A.A.C. R18-2-306.A.2]

Permittee shall combust pipeline quality natural gas as the fuel in the stationary gas turbine engines.

4. Sulfur Content [A.A.C. R18-2-719.J and R18-2-331.A.3]

The sulfur content of the fuel shall not exceed 0.8 percent by weight.
[This is a material permit condition]

B. Non-Point Sources

1. *Open Areas, Roadways & Streets, Storage Piles, and Material Handling*
 - a. Visible emissions from open areas, roadways, streets, storage piles or material handling shall not have an opacity greater than 40% measured in accordance with the Arizona Testing Manual, Reference Method 9.
[A.A.C. R18-2-610]
 - b. Permittee shall employ the following methods to prevent excessive amounts of particulate matter from becoming airborne:
 - (1) Continue to maintain gravel on driveways, parking areas, and vacant lots where motor vehicular activity occurs;
[A.A.C. R18-2-604.A]
 - (2) Maintain native vegetation on any unused open areas within the property fence line;
[A.A.C. R18-2-604.A]
 - (3) Use adequate dust suppressants or wetting agents on open areas during construction operations, repair operations, demolition activities, clearing operations, and leveling operations, or when any earth is moved or excavated;
[A.A.C. R18-2-604.A]
 - (4) Use adequate dust suppressants or wetting agents when a roadway is repaired, constructed, or reconstructed;
[A.A.C. R18-2-605.A]
 - (5) Use dust suppressants, wetting agents, or cover the load adequately when transporting material likely to give rise to airborne dust;
[A.A.C. R18-2-605.B and 606]
 - (6) Use spray bars, wetting agents, or dust suppressants when crushing, handling, or conveying material that is likely to give rise to airborne dust;
[A.A.C. R18-2-606]
 - (7) Adequately cover, use wetting agents or dust suppressants when stacking, piling, or otherwise storing organic or inorganic dust producing material; and
[A.A.C. R18-2-607.A]
 - (8) Operate stacking and reclaiming machinery utilized at storage piles at all times with a minimum fall of material and with the use of spray bars and wetting agents.
[A.A.C. R18-2-607.B]

El Paso Natural Gas Company - Hackberry Compressor Station

- (9) In addition to complying with Section I.C.3.c, Permittee shall not cause, allow, or permit the cleaning of any site, roadway, or alley without first applying dust suppressants or wetting agents. Earth or other material shall be removed from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water or by other means.

[A.A.C. R18-2-804.B]

2. Open Burning

[A.A.C. R18-2-602]

Permittee shall not conduct open burning except when permitted to do so by either ADEQ or the local officer delegated the authority for issuance of open burning permits.

C. Other Periodic Activities

1. *Abrasive Blasting*

[A.A.C. R18-2-726]

- a. The Permittee shall not cause or allow sandblasting or other abrasive blasting without minimizing dust emissions to the atmosphere through the use of good modern practices. Good modern practices include:

- (1) wet blasting; and
- (2) effective enclosures with necessary dust collecting equipment.

- b. Permittee shall not cause, allow or permit visible emissions from sandblasting or other abrasive blasting operations in excess of 40% opacity as measured by EPA Reference Method 9.

[A.A.C. R18-2-702.B]

2. *Use of Paints*

While performing spray painting operations the Permittee shall comply with the following requirements:

- a. The Permittee shall not conduct or cause to be conducted any spray painting operation without minimizing organic solvent emissions. Such operations other than architectural coating and spot painting, shall be conducted in an enclosed area equipped with controls containing no less than 96 percent of the overspray.

[A.A.C. R18-2-727.A]

- b. The Permittee or his designated contractor shall not either:

- (1) Employ, apply, evaporate or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or

El Paso Natural Gas Company - Hackberry Compressor Station

- (2) Thin or dilute any architectural coating with a photochemically reactive solvent. [A.A.C.R18-2-727.B]
- c. For the purposes of part b. and e. of this condition, a photochemically reactive solvent shall be any solvent with an aggregate of more than 20 percent of it's total volume composed of the chemical compounds classified in paragraphs (1) through (3) of this subsection, or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:
 - (1) A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation - hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: five percent
 - (2) A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: eight percent
 - (3) A combination of ethylbenzene, ketones having branched structures, trichloroethylene or toluene: 20 percent [A.A.C.R18-2-727.C]
- d. Whenever any organic solvent or any constituent of an organic solvent may be classified from it's chemical structure into more than one of the groups or organic compounds described in subsection c(1) through c(3) of this condition, it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents. [A.A.C.R18-2-727.D]
- e. Permittee shall not dispose by evaporation more than 1.5 gallons of photochemically reactive solvent in any one day. [SIP Provision R9-3-527.C]
- f. Visible emissions from spray painting operations shall not have an opacity of greater than 40%, as measured by EPA Reference Method 9. [A.A.C. R18-2-702.B]

3. *Mobile Sources*

a. Classification

The requirements of this condition are applicable to mobile sources which either move while emitting air contaminants or are frequently moved during the course of their utilization but are not classified as motor vehicles, agricultural vehicles, or are agricultural equipment used in normal farm operations. Mobile sources shall not include portable sources as defined in A.A.C. R18-2-101.84.

[A.A.C. R18-2-801]

b. Off-road Machinery

Permittee shall not cause, allow, or permit to be emitted into the atmosphere from any off-road machinery, smoke for any period greater than ten consecutive seconds, the opacity of which exceeds 40 percent. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes. Off-road machinery shall include trucks, graders, scrapers, rollers and other construction and mining machinery not normally driven on a completed public roadway.

[A.A.C. R18-2-802]

c. Roadway and Site Cleaning Machinery

Permittee shall not cause, allow or permit to be emitted into the atmosphere from any roadway and site cleaning machinery smoke or dust for any period greater than ten consecutive seconds, the opacity of which exceeds 40 percent. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes.

[A.A.C. R18-2-804.A]

4. *Demolition/Renovation*

Permittee shall comply with all of the requirements of 40 CFR 61 Subpart M (National Emissions Standards for Hazardous Air Pollutants - Asbestos).

[A.A.C. R18-2-1101.A.8]

5. Nonvehicle Air Conditioner Maintenance and/or Services

Permittee shall comply with all of the requirements of 40 CFR 82 Subpart F (Protection of Stratospheric Ozone - Recycling and Emissions Reduction).

[40 CFR 82, Subpart F]

II. MONITORING AND RECORDKEEPING REQUIREMENTS

[A.A.C. R18-2-306, R18-2-719.I]

A. Natural Gas Fired General Electric Regenerative Gas Turbines

1. Permittee shall monitor daily, the sulfur content and lower heating value of the fuel being combusted in the gas turbines and any other stationary rotating equipment. This requirement may be complied with by maintaining a copy of that part of the Federal Energy Regulatory Commission (FERC) approved Tariff agreement that limits transmission to pipeline quality natural gas of sulfur content less than 0.8 percent by weight and having a heating value greater than or equal to 967 Btu/ft³.
2. Permittee shall record the dates of operation for each one of the natural gas fired regenerative General Electric gas turbines.

El Paso Natural Gas Company - Hackberry Compressor Station

This information shall be recorded until such time when the fifteen cumulative days are triggered for conducting a performance test.

B. Non-Point Sources

1. *Open Areas, Roadways & Streets, Storage Piles, and Material Handling*

Permittee shall maintain records of the following:

- a. Dates gravel maintenance activities were performed in order to comply with the requirements of I.B.1.b.(1).
- b. Dates on which fresh vegetation was introduced as required.
- c. Dates on which any of the activities listed in I.B.1.b.(3) were performed, and control measures adopted.
- d. Dates on which any of the activities listed in I.B.1.b.(4) were performed, and control measures adopted.
- e. Dates on which the activity listed in I.B.1.b.(5) was performed, and control measures adopted.
- f. Dates on which any of the activities listed in I.B.1.b.(6) were performed, and control measures adopted.
- g. Dates on which any of the activities listed in I.B.1.b.(7) were performed, and control measures adopted.
- h. Dates on which any of the activities listed in I.B.1.b.(8) were performed, and control measured adopted.
- i. Dates on which any of the activities listed in I.B.1.b.(9) were performed, and the control measures adopted.

2. *Open Burning*

The recordkeeping requirements for I.B.2 of this Attachment may be complied with by maintaining copies of all open burning permits on file.

C. Other Periodic Activities

1. *Abrasive Blasting*

Each time an abrasive blasting project is conducted, the Permittee shall log in ink or in an electronic format, a record of the following:

- a. The date the project was conducted;

El Paso Natural Gas Company - Hackberry Compressor Station

- b. The duration of the project; and
- c. Type of control measures employed.

2. *Use of Paints*

- a. Each time a spray painting project is conducted, the Permittee shall log in ink or in an electronic format, a record of the following:
 - (1) The date the project was conducted;
 - (2) The duration of the project;
 - (3) Type of control measures employed; and
 - (4) Material Safety Data Sheets for all paints and solvents used in the project.
- b. Architectural coating and spot painting projects shall be exempt from the recordkeeping requirements of part a. above.

3. *Mobile Sources*

Permittee shall keep a record of all emissions related maintenance activities performed on Permittee's mobile sources stationed at the facility as per manufacturer's specifications.

4. *Demolition/Renovation*

As a means of demonstrating compliance with condition I.C.4 of this Attachment, the Permittee shall keep a record of all relevant paperwork on file. The relevant paperwork shall include, but not be limited to, the "NESHAP Notification for Renovation and Demolition Activities" form, and all supporting documents.

5. *Nonvehicle Air Conditioner Maintenance and/or Services*

As a means of demonstrating compliance with condition I.C.5 of this Attachment, the Permittee shall keep a record of all paperwork relevant to the applicable requirements of 40 CFR 82- Subpart F on file.

D. Location of Records

Permittee may retain all records relating to this permit and a copy of the permit at the Topock Complex Office, 5499 Needle Mountain Road, Topock, AZ 86436. The Permittee shall comply with the permit posting requirements of Attachment "A", Section IV. Records shall be maintained in a log and in accordance with the requirements of Section XII.B of Attachment "A".

III. REPORTING REQUIREMENTS

[A.A.C. R18-2-306.A.5.a]

El Paso Natural Gas Company - Hackberry Compressor Station

- A. Permittee shall notify the Director in writing within 30 days of any changes to the FERC-approved Tariff agreement relating to the fuel sulfur content and lower heating value limits that occur during the term of this permit.
- B. Permittee shall submit the following information pertaining to each one of the natural gas fired regenerative General Electric gas turbines:
 - 1. The dates of operation for the period specified in Section VII of Attachment "A".

This information shall be reported until such time when the fifteen cumulative days are triggered for conducting a performance test.
 - 2. Until a performance test pursuant to Section IV.A of this Attachment is completed, Permittee shall report the status of the testing requirement.
- C. At the time the compliance certifications required by Section VII of Attachment "A" are submitted, the Permittee shall submit reports of all monitoring activities required by Section II of this Attachment performed in the six months prior to the date of the report.

IV. TESTING REQUIREMENTS

[A.A.C. R18-2-306.A.3]

- A. The Permittee shall conduct one set of performance tests on each turbine that is operated for more than 15 days. These performance tests shall be completed within six months prior to this permit expiration. Each set of performance tests shall include all of the pollutants listed in Section IV.B of this Attachment.
- B. Permittee shall use the following EPA approved reference test methods to conduct performance tests for the specified pollutants:

Nitrogen Oxides. EPA Reference Method 20.
- C. The permittee may submit an alternate and equivalent test method(s) that is listed in 40 CFR Subpart 60, Appendix A, to the Director in a test plan, for approval by the Director.
- D. Additional testing requirements are located in Section XVII of Attachment "A" of this permit.

ATTACHMENT "C": APPLICABLE REQUIREMENTS

Air Quality Control Permit No. 1000165

For

EL PASO NATURAL GAS COMPANY - Hackberry Compressor Station

REQUIREMENTS SPECIFICALLY IDENTIFIED AS APPLICABLE

Compliance with the terms contained in this permit shall be deemed compliance with the following federally applicable requirements in effect on the date of permit issuance:

ARIZONA ADMINISTRATIVE CODE (A.A.C.) TITLE 18, Chapter 2

ARTICLE 6. EMISSIONS FROM EXISTING AND NEW NONPOINT SOURCES

R18-2-602	Unlawful Open Burning
R18-2-604	Open areas, dry washes, or riverbeds
R18-2-605	Roadways and streets
R18-2-606	Material handling
R18-2-607	Storage piles
R18-2-610	Evaluation of nonpoint source emissions

ARTICLE 7. EXISTING STATIONARY SOURCE PERFORMANCE STANDARDS

R18-2-702.B	General provisions
R18-2-719.C.1	Standards of performance for existing stationary rotating machinery
R18-2-719.E	Standards of performance for existing stationary rotating machinery
R18-2-726	Standards of performance for sandblasting operations
R18-2-727	Standards of performance for spray painting operations
SIP R9-3-527.C	Standards of performance for spray painting operations

ARTICLE 8. EMISSIONS FROM MOBILE SOURCES (NEW AND EXISTING)

R18-2-801	Classification of mobile sources
R18-2-802	Off-road machinery
R18-2-804	Roadway and site cleaning machinery

ARTICLE 11. FEDERAL HAZARDOUS AIR POLLUTANTS

R18-2-1101.A.8	National Emission Standards for Hazardous Air Pollutants (NESHAPs), (by reference) 40 CFR 61, Subpart M - Asbestos
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CODE OF FEDERAL REGULATIONS, PART 40

40 CFR 82 - Subpart F Protection of Stratospheric Ozone (Recycling and Emissions Reduction)

REQUIREMENTS SPECIFICALLY IDENTIFIED AS NOT APPLICABLE

As requested by the Permittee, specific non-applicable requirements have been identified as follows. A permit shield is granted from these requirements.

40 CFR 60, Subpart GG
A.A.C. R18-2-703

New Source Performance Standards - Stationary Gas Turbines
Standards of Performance for Existing Fossil-Fuel Fired Steam Generators
and General Fuel-Burning Equipment

A.A.C. R18-2-724

Standards of Performance for Fossil-Fuel Fired Industrial and Commercial
Equipment

ATTACHMENT "D": EQUIPMENT LIST

Air Quality Control Permit No. 1000165

For

EL PASO NATURAL GAS COMPANY - Hackberry Compressor Station

PERMITTED EQUIPMENT						
Emission Unit I.D.	Equipment I.D.	Description	Size*	Serial Number	Model	Manufacture Date/ Installation Date
P1	A-1	Natural gas-fired Regenerative General Electric Gas Turbine Engine	7635 hp	147834	M3962R	1965
P2	A-2	Natural gas-fired Regenerative General Electric Gas Turbine Engine	7635 hp	147835	M3962R	1965
F1	Misc.	Non-point sources	-	-	-	-
F2	Misc.	Abrasive Sandblasting	-	-	-	-
F3	Misc.	Spray Painting	-	-	-	-
F4	Misc.	Mobile Sources	-	-	-	-
F5	Misc.	Demolition/Renovation	-	-	-	-

*Site horsepower @ 80° F

ATTACHMENT "E": INSIGNIFICANT ACTIVITIES

Air Quality Control Permit No. 1000165

For

EL PASO NATURAL GAS COMPANY - Hackberry Compressor Station

	POTENTIAL EMISSION POINTS CLASSIFIED AS "INSIGNIFICANT ACTIVITIES" PURSUANT TO A.A.C. R18-2-101.54
S. No.	Description
1	Internal combustion (IC) engine-driven compressors, IC engine-driven electrical generator sets used only for emergency replacement or standby service.
2	Petroleum-based solvent tanks less than 10,000 gallons (solvent with a vapor pressure less than gasoline.)
3	Lube oil storage tanks.
4	Minor natural gas-fired appliances, in the aggregate rated less than 500,000 BTU/hr (such as hot water heaters, HVAC, etc.)
5	Temporary hydrostatic test water evaporation ponds.
6	Pressure tanks.
7	Used oil systems.
8	General maintenance of regulated emissions units, including, but not limited to, oil filter replacement (including drainage of oil filters), and work on the engine jacket water system.
9	Fan systems.
10	Maintenance and use of inertial separators (to filter air intake into the gas turbine engines.)
11	Exercise of standby equipment.
12	Domestic wastewater systems.
13	Plant water and wastewater system.
14	Emergency Shut Down system and pressure relief valves.
15	Blowdown activities from startup and shutdown.
16	Scrubber liquid systems.
17	Oil/water separator system.
18	Cathodic protection system.
19	Vents, valves, and flanges.
20	Solvent degreasing.
21	Cooling water systems.
22	General plant maintenance, construction, and upkeep activities not associated with the Permittee's primary business activity, and not otherwise triggering a permit modification.

El Paso Natural Gas Company - Hackberry Compressor Station

	POTENTIAL EMISSION POINTS CLASSIFIED AS "INSIGNIFICANT ACTIVITIES" PURSUANT TO A.A.C. R18-2-101.54
S. No.	Description
23	Manually operated equipment used for buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding, or turning of precision parts, leather, metals, plastics, fiber board, masonry, carbon, glass, or wood.
24	Use of consumer office products.
25	Use and maintenance of electric driven equipment for general location maintenance including but not limited to a bench grinder, drill press, pipe threader, and lathe.
26	Steam cleaning activities.
27	Welding activities.
28	Laboratory equipment.
29	Safety equipment.
30	Uninterruptable power supply systems.
31	Utility pumps and systems.
32	Use of chlorination systems.